

- 1 67. (New) The printed circuit board of claim 36, wherein said conductive coating adheres
 - 2 to said dielectric coating and other elements mounted on the printed circuit board.
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- 1 68. (New) The printed circuit board of claim 36, wherein said dielectric coating and said
 - 2 conductive coating have similar composite resin structures.
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- 1 69. (New) The printed circuit board of claim 36, wherein said conductive coating has an
 - 2 ohmic resistance of between 0.05 and 0.2 ohms per square at a film thickness of
 - 3 approximately 1 mil.
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- 1 70. (New) The printed circuit board of claim 36, wherein said conductive coating has a
 - 2 thickness of 1.1 ± 0.2 mils

REMARKS

This is a preliminary amendment in which the Applicants have canceled the previously withdrawn and other claims, and have added additional dependent claims to the elected claim set. Specifically, claims 36, 38, 39, 41, 42, 44, 46, 47, 48 have been amended. Claims 1-35, 37, 40, 43, 45, 49, 51 and 52 have been canceled and new claims 53-70 have been added. Thus, by the foregoing amendments, claims 36, 38, 39, 41, 42, 44, 46-48, 50 and 53-70 are now pending in the application. No new matter has been added. Entry is respectfully requested.

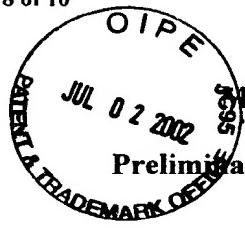
In view of the foregoing Amendments, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after entering this paper into the record, that the application is not in condition for

allowance, the Examiner is requested to call the Applicants' representative at the number provided below.

Respectfully submitted,
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Docket No. 10992052-1
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Marked-Up Claims Showing Changes Made

In

Preliminary Amendment filed in Application No. 09/812,274

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36. (Amended) A printed circuit board comprising:

a printed wiring board;

a plurality of components mounted on said printed wiring board; and

an electrically continuous conformal coating for providing an EMI-impervious shield conformingly coating [and adheringly on] the printed circuit board, including,

a conductive coating that prevents the electromagnetic waves from passing therethrough, said conductive coating conformingly adhered to [and adheringly coating] the surface of one or more regions of the printed circuit board, wherein said conductive coating of each said region is electrically connected to each other, and

a dielectric coating interposed between said conductive coating and predetermined portions of each said printed circuit board region, wherein said dielectric coating completely insulates said predetermined portions of said printed circuit board region.

38. (Amended) The printed circuit board of claim 36, [37,] wherein said one or more regions of said conformal coating are physically contiguous.

39. (Amended) The printed circuit board of claim 36, [37,] wherein said printed circuit board comprises:

a plurality of ground [grounding] pads mounted in said printed wiring board, wherein said conductive coating is connected electrically to said ground [grounding] pads; [, wherein aid ground pads are electrically connected to a ground source of the printed wiring board.]

a ground plane disposed in said printed wiring board; and

a ground via connected to said ground pads and said ground plane.

41. (Amended) The printed circuit board of claim 39, [40,] wherein said printed circuit board further comprises:

a shielded connector mounted on said printed wiring board, said shielded connector connected to a shielded cable through which signals travel,[:]

wherein said ground pads comprise a ground moat mounted on printed wiring board substantially around said shielded connector and connected electrically to a shield of said connector and to said ground plane.

42. (Amended) The printed circuit board of claim 36, [40,] wherein said regions of said conformal coating comprise:

a first region coating at least a portion of a top surface of said printed circuit [wiring] board; and

a second region covering at least a portion of a bottom surface of said printed circuit [wiring] board.

44. (Amended) The printed circuit board of claim 42, wherein said printed circuit board has edge plating connected electrically to said first and second regions of said conformal coating, wherein said edge plating is electrically connected to a ground plane of said printed wiring board.

46. (Amended) The printed circuit board of claim 42, wherein said electrical connection between said first and second regions is provided by a combination of:

a first ground strip mounted on said top surface of said printed wiring board;

a second ground strip [land] mounted on said [top surface and said] bottom surface of said printed wiring board [proximate to the edge of said printed wiring board];
and

a plurality of ground vias disposed in said printed wiring board to connect said first and second ground strips [electrically conductive spring clips] spaced around said printed wiring board so as to contact said first and second ground strips [lands on said top and bottom surfaces of said printed wiring board].

47. (Amended) The printed circuit board of claim 42, wherein said electrical connection between said first and second regions is provided by a plurality of electrically conductive spring clips spaced around said printed wiring board [so as to contact] to be electrically coupled with said conductive coating of said first region and said conductive coating of said second region.

48. (Amended) The printed circuit board of claim 36, [42,] wherein said printed wiring board comprises signal traces formed on the surface thereof, wherein said dielectric coating and said signal traces are constructed and arranged such that [one or more of the following features are selected alone or in combination such that] said surface signal traces have a desired characteristic impedance[:]

width of said surface signal traces;
thickness of said surface signal traces;
dielectric constant of said dielectric coating; and
thickness of said dielectric coating].

50. (Amended) The printed circuit board of claim 36, [40,] wherein one or more components are coated individually with said [a] conformal EMI shield, wherein said [component] conformal EMI shield which coats the one or more components is electrically connected to said conformal coating on said printed circuit board.